





INDEPENDENT OFFICES APPROPRIATION BILL FOR 1939

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

SEVENTY-FIFTH CONGRESS

SECOND SESSION

ON THE

INDEPENDENT OFFICES
APPROPRIATION BILL FOR 1939

J.E.G.
FEB 24 1941

Mr. COLLETT. Yes. And we have done more in the last year, it seems to me, than has been accomplished in previous times. We have an exceedingly energetic lawyer on the job, a good one.

Mr. WIGGLESWORTH. Is it a full-time job for him?

Mr. COLLETT. No.

Mr. WIGGLESWORTH. Is it a full-time job for his assistant?

Mr. COLLETT. Yes.

Mr. DIRKSEN. Is the General Petroleum Corporation the operating company here?

Mr. COLLETT. I think that is the operating company in the 16 case. They have a lease on section 16.

Mr. HOUSTON. Are these payments being held up on the oil while these suits are pending?

Mr. COLLETT. There have been no payments made to us.

Mr. HOUSTON. I mean, to the operators?

Mr. COLLETT. They proceeded to take the oil. They were in possession, and took the oil and sold it and never accounted for it.

Mr. HOUSTON. Whom did they sell it to?

Mr. COLLETT. The Standard Oil Co., being in possession, just took the oil and disposed of it themselves through their own selling agencies.

Mr. WOODRUM. They didn't sell it to any other concern?

Mr. COLLETT. Not as far as I know.

Mr. WOODRUM. So that you couldn't hold up the payments?

Mr. COLLETT. No.

Mr. WOODRUM. All right. Gentlemen, are there any further questions? Thank you, Mr. Collett.

Mr. COLLETT. Thank you.

Mr. WIGGLESWORTH. It is not possible to handle this through the Department of Justice?

Mr. COLLETT. These actions were instituted by reason of a general resolution of Congress which authorized the President to appoint special counsel. So, while a Federal matter is the basis of the actions, nevertheless Mr. Preston is a Presidential appointee and the Department does not feel warranted in interfering.

THURSDAY, *December 9, 1937.*

SMITHSONIAN INSTITUTION

STATEMENTS OF DR. C. G. ABBOT, SECRETARY; DR. ALEXANDER WETMORE, ASSISTANT SECRETARY; H. W. DORSEY, ADMINISTRATIVE ASSISTANT TO THE SECRETARY; M. W. STIRLING, CHIEF BUREAU OF AMERICAN ETHNOLOGY; JOHN E. GRAF, ASSOCIATE DIRECTOR, NATIONAL MUSEUM; W. P. TRUE, EDITOR; AND DR. L. F. STOCK, AMERICAN HISTORICAL ASSOCIATION

Mr. WOODRUM. The committee has before it for consideration this afternoon the Budget estimate and the language contained in the regular message relating to the Smithsonian Institution as follows:

For expenses of the general administrative office; for the system of international exchanges between the United States and foreign countries; for continuing

ethnological researches among the American Indians and the natives of Hawaii and the excavation and preservation of archeologic remains; for maintenance of the Astrophysical Observatory, including assistants and making necessary observations in high altitudes; for cases, furniture, fixtures and appliances required for the exhibition and safekeeping of collections; and for administration of the National Collection of Fine Arts; including personal services, purchase of books of reference and periodicals, traveling expenses, uniforms for guards, supplies and equipment, preparation of manuscripts, drawings, and illustrations, supplying of heating, lighting, electrical, telegraphic, and telephone service, repairs and alterations of buildings, shops, sheds and approaches, and other necessary expenses, \$343,785.

Preservation of collections: For continuing preservation, exhibition, and increase of collections from the surveying and exploring expeditions of the Government, and from other sources, including personal services, traveling expenses, purchasing and supplying uniforms to guards and elevator conductors, postage stamps and foreign postal cards and all other necessary expenses, and not exceeding \$5,500 for preparation of manuscripts, drawings, and illustrations for publications, and not exceeding \$3,000 for purchase of books, pamphlets, and periodicals, \$609,380.

Printing and binding: For all printing and binding for the Smithsonian Institution, including all of its bureaus, offices, institutions, and services located in Washington, District of Columbia, and elsewhere \$68,000, of which not to exceed \$8,000 shall be available for printing the report of the American Historical Association (31 U. S. C. 588; 44 U. S. C. 289; 50 Stat.343).

Total, Smithsonian Institution, \$1,021,165, of which amount not to exceed \$846,000 may be expended for personal services in the District of Columbia.

JUSTIFICATIONS OF ESTIMATE FOR 1939

Mr. WOODRUM. Do you have the items for the Smithsonian Institution, Dr. Abbot?

Dr. ABBOT. Yes. A copy of the statement has been submitted to the members of the committee.

(The statement referred to is printed in the record as follows:)

General expenses

Expended, 1937.....	\$338, 455
Available, 1938.....	342, 785
Reserve, 1938.....	6, 500
Appropriated, 1938.....	349, 285
Estimated, 1939.....	343, 785
Decrease, 1939.....	5, 500

(This appropriation represents a consolidation of six appropriations formerly carried under the Smithsonian Institution as follows:)

	Estimate 1939	Appropriation, 1938
Salaries and expenses, Smithsonian Institution.....	\$36, 330	\$36, 330
International exchanges, Smithsonian Institution.....	44, 600	44, 260
American Ethnology, Smithsonian Institution.....	58, 730	58, 730
Astrophysical Observatory, Smithsonian Institution.....	30, 850	30, 850
Maintenance and operation, National Museum.....	139, 000	144, 840
National Collection of Fine Arts, Smithsonian Institution.....	34, 275	34, 275
Total of consolidated appropriations.....	343, 785	349, 285

It provides for certain expenses of the Smithsonian Institution for research and operation as (1) for salaries of employees concerned with the general administration of the several Government bureaus under the direction of the Smithsonian Institution together with miscellaneous office supplies and other routine expenses connected with this work; (2) for carrying on the exchange of governmental, scientific, and literary publications between the United States and foreign countries in accordance with the Convention of Brussels of March 15, 1886, to which the United States was a signatory and under which the Smithsonian Institution

acts as agent for the United States Government; (3) for the investigations of solar radiation, their accurate measurement, the analyses of the results obtained and their interpretation in terms of weather changes; (4) for the investigation of the languages, customs, and history of the American Indians and the natives of Hawaii, including the archeology as related to these races and the preservation of archeological sites; (5) for the maintenance and operation of the Museum buildings under the administration of the Smithsonian Institution including salaries of the mechanical force, repairs and alterations of buildings, exhibition and storage cases, and related miscellaneous expenses; (6) for the work of the National Collection of Fine Arts, including the custody, preservation, and exhibition of that portion of the national collections which relates to the fine arts and which is now in the custody of the Smithsonian Institution.

The funds available for carrying on the activities shown above are barely sufficient to meet minimum requirements and no portion of the amount now available can be spared for the work covered by the increase shown below.

The decrease in appropriation for 1939 is explained as follows:

(1) *Increase.*—(a) \$340 for the payment of additional freight charges on publications to foreign countries. For several years it has been necessary to suspend shipments of these publications during the latter part of the year owing to lack of funds. The estimate recommended is urgently needed for maintaining this work during the latter part of the year.

(b) \$4,610 for repairs to buildings. This increase in appropriation is for paint, lumber, and miscellaneous building repairs. Current funds for this purpose are insufficient to provide for major repairs to windows, roofs, and walls, which are required soon in order to prevent future heavy expenditures. The amount requested will over a period of years make it possible to check major deteriorations in our buildings.

(2) *Decrease.*—(a) \$10,450 for fire protection. This amount was appropriated to furnish an added connection to the city mains to give an extra high-pressure pipe line for fire protection and to replace worn-out hose. Since this work will be completed during the present fiscal year, it will not be required in the appropriation for 1939.

Total increase.....	\$4, 950
Total decrease.....	10, 450
Net decrease for 1939.....	5, 500

For the convenience of the committee, the following justification sheets have been made out separately to cover each of these activities.

Salaries and expenses

Expended, 1937.....	\$36, 323
Available, 1938.....	36, 080
Reserve, 1938.....	250
Appropriated, 1938.....	36, 330
Estimate, 1939.....	36, 330
Increase over appropriation for 1938.....	0

This appropriation provides for the salaries of employees concerned with the general administration of the several Government bureaus under the direction of the Smithsonian Institution and includes a small sum for miscellaneous office supplies and other routine expenses connected with this work. The funds appropriated are all required to meet the minimum responsibilities of this office.

The estimate for 1939 is the same as the appropriation for 1938.

International exchanges

Expended, 1937.....	\$44, 260
Available, 1938.....	43, 260
Reserve, 1938.....	1, 000
Appropriated, 1938.....	44, 260
Estimate, 1939.....	44, 600
Increase over appropriation for 1938.....	340

This appropriation provides for carrying on the exchange of governmental, scientific, and literary publications between the United States and foreign countries in accordance with the Convention of Brussels of March 15, 1886, to which the United States was a signatory and under which the Smithsonian Institution acts as the agent for the United States Government. The publications received from foreign countries in exchange for United States Government publications are deposited in the Library of Congress.

The appropriations for several years have been insufficient to cover salaries of the personnel required, freight charged on shipments, and the small amount required for miscellaneous office supplies, necessitating the suspension of shipments before the end of these years.

The increase of \$340 available for 1939 is for the payment of additional freight to help maintain shipments throughout the entire year.

Bureau of American Ethnology

Expended, 1937.....	\$58,722
Available for 1938.....	57,730
Reserve, 1938.....	1,000
Appropriated, 1938.....	58,730
Estimate, 1939.....	58,730
Increase over appropriation for 1938.....	0

The work under this appropriation is concerned with investigations of the languages, customs, and history of the American Indians and the natives of Hawaii. It also provides for the study for archeology as related to these races and for the preservation of archeological sites. The urgency of this work is indicated by the continuing disappearance of the few survivors of a considerable number of tribes as well as many older Indians who alone are familiar with the original tribal customs and culture. With their death there will be lost forever all opportunity for acquiring knowledge of the languages and cultures of these native American groups. In addition, the looting of ancient village sites of extinct aboriginal peoples is proceeding rapidly and with them there is destroyed the story of our predecessors on this continent.

The discovery by the Bureau of American Ethnology of the now famous Lindenmeier site in Colorado which was proved to be the most ancient human habitation site yet found in the New World is recognized by anthropologists as one of the outstanding events in American archeology.

Astrophysical Observatory

Expended, 1937.....	\$30,800
Available, 1938.....	29,850
Reserve, 1938.....	1,000
Appropriated, 1938.....	30,850
Estimate, 1939.....	30,850
Increase over appropriation for 1938.....	0

The work under this appropriation is concerned with the investigations of solar radiation, the driving force for all life. No other establishment in the world duplicates them. The accurate measurement of variations in solar radiation, supported by a careful analysis of such measures, has given indications of a definite relationship between the variations in solar radiation and weather changes. Long-range weather predictions both of temperature and precipitation seem to be practicable from solar observations. Unfortunately, solar radiation reports obtained from the three present observing stations are not sufficiently complete to make it possible to reduce long-range weather forecasting to practice. Other stations are needed. Yet the continuation of present records will make possible further investigations on this subject which is of such fundamental economic importance to industry and agriculture. The funds available under this appropriation are all required to carry on the present minimum activities of the Observatory and are not sufficient to provide for any additional observing stations.

The estimate for 1939 is the same as the appropriation for 1938.

Maintenance and operation (National Museum)

Expended, 1937-----	\$134, 092
Available, 1938-----	142, 340
Reserve, 1938-----	2, 500
Appropriated, 1938-----	144, 840
Estimate, 1939-----	139, 000
Decrease below appropriation for 1938-----	5, 840

This appropriation deals with the maintenance and operation of the Museum buildings under the administration of the Smithsonian Institution and provides for salaries of the mechanical force, for repairs and alterations of buildings in the Museum group, comprising the Natural History Building, Arts and Industries Building, Aircraft Building, South Shed, and the Smithsonian Building, for the purchase of electricity necessary for lighting the buildings, and for telegraphic and telephonic services. It also provides for such items as exhibition and storage cases and other appliances and containers for exhibiting, storing, and safeguarding the National collections, which compare favorably with the great museum collections of the world, as they now number over 15,000,000 specimens and represent the wide field concerned with the achievements and interests of man. Present funds available under this appropriation are all required for the maintenance and operation of the Museum buildings and no portion of it can be used to cover the work included in the increase shown below.

The decrease in appropriation for 1939 is explained as follows:

- (1) Increase, building repairs----- \$4, 610

The foregoing increase in appropriation is for building repairs, paint and lumber. Current funds for building repairs are insufficient to provide for major repairs to windows, roofs and walls which are required early in order to prevent future heavy expenditures. The amount requested will, over a period of years, make it possible to check the major deteriorations.

- (2) Decrease, fire protection----- \$10, 450

(A nonrecurring item which will be completed in fiscal year 1938.)

- Net decrease for 1939----- 5, 840

National collection of fine arts

Expended, 1937-----	\$34, 258
Available, 1938-----	33, 525
Reserve, 1938-----	750
Appropriated, 1938-----	34, 275
Estimate, 1939-----	34, 275

- Increase over appropriation for 1938----- 0

This appropriation provides for the work of the National Collection of Fine Arts (the name being changed from "National Gallery of Art" by the act of Mar. 24, 1937) and includes the custody, preservation, and exhibition of that portion of the national collections now in possession of the Institution, relating to the fine arts, and including principally paintings and sculpture. It provides for the salaries of the staff and minimum running expenses, and under it is carried on the extensive public contacts relating to the fine arts, and scientific and curatorial work on the collections. The present appropriation is all required for carrying on the absolutely essential work in connection with the maintenance of the National Collection. The estimate for 1939 is the same as the appropriation for 1938.

Preservation of collections (National Museum)

Expended, 1937-----	\$694, 075
Available, 1938-----	606, 380
Reserve, 1938-----	3, 000
Appropriated, 1938-----	609, 380
Estimate, 1939-----	609, 380

- Increase over appropriation for 1938----- 0

The funds under this appropriation provide for all expenses of the National Museum not carried specifically in other appropriations. It includes the principal funds for the maintenance of the national collections relating to arts and industries, anthropology, biology, geology, and American history. The appropriation covers the salary roll for the curatorial staff, as well as the guard, labor, and char forces. Under it there is carried on the work of identifying, clasifying, exhibiting, and storing the national collections relating to anthropology, biology, geology, history, and the arts and industries, the preparation of reports presenting the results of study of these collections, expenses in connection with additions to the collections, and the greater part of the cost of the maintenance of the extensive public exhibits of the Museum, which are housed in three buildings and a portion of a fourth. It provides also for books for the Museum Library and for foreign postage used in the transaction of Museum business. Over 95 percent of the appropriation is allotted for salaries and the remainder is barely sufficient to meet the minimum responsibilities of the Museum. There is no increase in the appropriation for 1939.

The funds available under this appropriation are all required to carry on the present activities of the Bureau which are of fundamental importance.

The estimate for 1939 is the same as the appropriation for 1938.

<i>Printing and binding</i>	
Expended, 1937-----	\$67, 500
Available, 1938-----	.58, 500
Reserve, 1938-----	6, 500
Appropriated, 1938-----	65, 000
Estimate, 1939-----	68, 000
Increase over appropriation for 1938-----	3, 000

This appropriation provides for the printing of the Smithsonian Annual Report with its appendix, and for printing the publications covering the scientific work of Federal branches under the administration of the Institution, and of miscellaneous cards, forms, and labels, necessary in the work of such units. It also provides for the binding of periodicals and books for the library and includes not exceeding \$8,000 for printing the Report of the American Historical Association.

The increase for 1939 is explained as follows:

(1) Increase, printing and binding-----	\$3, 000
---	----------

The increase of \$3,000 will be utilized for the publication of accumulated manuscripts resulting from the researches of the scientific staff which contain basic information of importance to scientific workers throughout the world, much of which will be used as a basis of economic investigations. Most of this increase will be utilized for the issuance of this essential information in the form of bulletins and proceedings of the National Museum, and bulletins of the Bureau of American Ethnology. A portion of the increase will be required to meet the increased cost of printing and binding.

CONSOLIDATION OF ITEMS OF APPROPRIATION

Mr. WOODRUM. We will be glad to hear from you, Dr. Abbot.

Dr. ABBOT. It has been suggested to us by the Bureau of the Budget, and we fell in with their suggestion, that several of the items which hitherto have been separately considered should now be lumped into one title under "General expenses of the Smithsonian Institution." We think that an agreeable gesture on the part of the Bureau of the Budget indicating some confidence in our management of affairs and we think, too, that it will be possibly less trouble to the committee and furnish a more satisfactory method of appropriating for the expenses of these several divisions of the Institution.

ADMINISTRATIVE APPROPRIATION RESERVE

The Institution was informed, as other institutions and agencies of the Government, that it should set aside 10 percent of the present year's appropriation as a reserve, but it was at the same time expressed by the President that a good deal of that reserve might later be released. Our green sheets of the Bureau of the Budget carried the arrangement which was agreed upon, but at the suggestion of the Bureau of the Budget these reserves were finally eliminated from them, though still I suppose in the picture.

INSUFFICIENCY OF APPROPRIATIONS

But I would like to remind the committee, Mr. Chairman, that we are really suffering for the lack of adequate funds, the Bureaus of Ethnology and International Exchanges perhaps in greatest degree. The Bureau of International Exchanges, for example, will probably have to suspend shipments in the month of June of next year on account of the increase of the costs, that is, increase in the cost of trucking, increase in the amount of business, and increase in the price of boxes, so that we shall have to ask the Bureau of the Budget to release the reserve in that bureau when that time comes, and even then this may not be sufficient to carry us through to the 1st of July.

I hope that the committee will not feel that because of the exigency which has caused the administration to make this extraordinary reserve for this year that it is a thing to be carried forward in the future Institutions program, because the usual appropriations are insufficient for the purposes required. For instance as appears for several years in the statements by Assistant Secretary, Dr. Wetmore, in regard to this matter, as you recall, we have been endeavoring for years to get our guard force adequate and we have not been able to do so for so long that we have almost ceased to hope it will ever be.

And again for the past 7 years, or thereabout, we have not had adequate promotions, especially among the lower salaried grades, so that our morale suffers from the lack of adequate pay to our force.

However we, of course, feel entirely loyal and the Institution is carrying on with the program of the Administration and we are trying to conduct our business with what means we have.

I do not know that I need to carry the matter any further at the present time or to make a longer opening statement. We may now proceed to consider the items.

Mr. WOODRUM. To consider the financial aspect?

Dr. ABBOT. Yes.

ESTIMATES FOR 1939

Mr. WOODRUM. The arrangement sheet furnished by the Budget contains a consolidation into one paragraph of paragraphs which heretofore took care of general administrative expenses, expenses of the international exchanges, Bureau of American Ethnology, the Astrophysical Observatory, the maintenance and operation of the National Museum, and the National Collection of Fine Arts.

Dr. ABBOTT. Yes.

Mr. WOODRUM. They are all combined into this one paragraph which we are now considering.

Dr. ABBOTT. Yes.

Mr. WOODRUM. As one member of the committee I think that is a very good idea to have it in that way, because they are just bureaus or divisions under one institution and there is no reason to separate them.

The appropriation for the combined bureaus in 1938 was \$343,785. Is that correct?

Dr. ABBOTT. Yes, that is for 1939.

Mr. WOODRUM. And that represents appropriations for the same activities this year.

Mr. FITZPATRICK. You gave, Mr. Chairman, \$343,785. It is the estimate for 1939, is it not?

Mr. WOODRUM. This is the estimate for 1939.

Dr. ABBOTT. The appropriation of \$349,285 was for the year 1938.

Mr. FITZPATRICK. That is \$5,500 less for this year than for last year?

Dr. ABBOT. I am going to ask Dr. Wetmore to discuss that. I think he can cover that detail better than I.

Dr. WETMORE. In the last year's appropriation under the item of "Maintenance and operation" was carried an item of \$10,540 for the elimination of certain fire hazards in the National Museum. And, that was not a continuing item. So that part of the appropriation for last year was not carried forward this year, although the appropriation was on the other hand increased as indicated in the explanation attached, and in certain items that will be explained in the hearing a little later. The total amount of the appropriation for the Institution, or rather the estimate for the Institution is less than for last year.

Mr. FITZPATRICK. That all comes entirely out of maintenance?

Dr. WETMORE. That represents a decrease of about \$5,500.

Mr. DIRKSEN. To \$343,785?

INTERNATIONAL EXCHANGES

Dr. ABBOT. Mr. Chairman, I would like to ask Mr. Dorsey, the administrative assistant, to explain the item for international exchanges.

Mr. WOODRUM. Yes, Mr. Dorsey.

Mr. DORSEY. We had to stop shipments last year before the end of the year on account of lack of funds and the Bureau of the Budget was good enough to allow in the estimate for 1939, an increase of \$340, which was to help take care of the payment of these additional freight charges to the end of the year. I would like to say to the committee that since the beginning of July the rate paid for transportation by truck on our shipments to New York and Baltimore, has increased so that on the basis of the average amount we have shipped for several years the additional cost of this item alone would amount to something over \$900. And in the cost of boxes, of which we purchase about 2,000 new boxes, a year, the price has gone up on an average, for the different sizes, of 20 cents a box and on the basis of that increase there will be required \$400 more for boxes.

We try to economize in every way we can in the matter of boxes. We take the old boxes that come in and have a man to remake them utilizing what parts are still good and in that way we have saved a good deal, these remade boxes costing us about 32 cents whereas each

new box would cost around a dollar. We have about 500 of those boxes remade each year and that means a considerable saving.

In addition to the increased cost of freight and boxes for this year we also have an increase in the amount of business; we have had since July 1 an increase of about 6,000 pounds over the corresponding period last year and we will have to handle that. So that altogether, as against this increase of \$340 in the estimate, we have a prospective increase in expenses of something like \$1,800. We would like to maintain the shipments up to the end of the year but at the present rate of increased costs and amount of business we will have to suspend shipments around May 1.

Mr. HOUSTON. What is the nature of the international exchanges?

Mr. DORSEY. These are exchanges of governmental, scientific, and literary publications between the United States and foreign countries sent in accordance with the treaty which the United States has with these countries, the Smithsonian being the agent for this country in their transmission. We also send abroad besides parliamentary and departmental documents the proceedings of scientific societies, and publications of learned institutions and individuals and receive from abroad those sent to them in exchange.

Mr. HOUSTON. That is a continuous amount?

Mr. DORSEY. Yes.

Mr. HOUSTON. It is approximately the same for each year?

Mr. DORSEY. It fluctuates with the amount of material that is sent to us to be forwarded.

Mr. HOUSTON. There is no great amount of fluctuation, I mean?

Mr. DORSEY. We handle usually about six hundred to six hundred and fifty thousand pounds; sometimes seven hundred thousand, so it varies somewhat.

We also distribute to institutions in this country the publications that are sent to us for them from foreign countries. I think you would be interested, Mr. Houston, to know what a help this is to these various organizations and how much they appreciate the service. For example, I have here a letter, which I will not take time to read, from a doctor who has collected and is sending a great quantity of books to a Women's Medical College in Punjab, India. She is most appreciative, as the college, for lack of money, would not otherwise be able to get them. And in the same way, other institutions write expressing appreciation of the usefulness of the international exchange service to them.

Dr. ABBOT. This exchange was originally set up by the first secretary of the Smithsonian Institution, who realized that this country was more or less in provincial status at that time with respect to the culture of the Old World. He started the system of sending abroad different publications of the Smithsonian to quite a number of institutions in exchange for their own publications. With these sendings of Smithsonian publications he invited other American establishments to include their own papers for foreign correspondents, and this practice has grown until now they go to all different parts of the world.

By these methods he made different foreign scientific communications and publications available in the United States. Later the Government came to include its documents in sendings abroad through the Smithsonian, so that by about 1878 the Smithsonian Institution

was, from the income of its private funds, using some \$10,000 annually for the payment of freight, including scientific publications, parliamentary documents, and all sorts of scientific and other publications by the United States Government. This, of course, was a very heavy tax on the small revenue from the private funds of the Smithsonian Institution and on its representation to the Congress it was deemed desirable to enter into treaty relations with other countries to establish a system of international exchanges, which was done.

The system had grown up however through the private initiative of the Smithsonian Institution and as it was well managed the Congress has always continued to provide for this service by the Institution. As to the number of sets of parliamentary documents which are sent to different countries in exchange for those sent to us, this is determined by the Library of Congress. We are in effect simply the forwarding agent for all Government publications and we have no say as to the quantity of Government publications to be delivered to us for forwarding, which is now by far the larger part of the exchange sendings. We are just acting as the forwarding agency for the Government.

Mr. DORSEY: One of the reasons for the exchange treaty was to enable the United States to obtain the parliamentary documents of other governments for the use of the Congress.

Dr. ABBOT. And also the publications on public matters.

Mr. DORSEY. Yes.

Dr. ABBOT. All kinds of scientific and official publications.

Mr. DORSEY. Yes.

RECEIPTS OF PRIVATE FUNDS FOR COLLECTION OF SPECIMENS BY
SMITHSONIAN INSTITUTION

Mr. FITZPATRICK. What amounts come in other than appropriations by the Government for this?

Mr. DORSEY. About \$5,000. The departments have paid the Institution 5 cents a pound for the transmission of their documents, which amounts to about \$5,000 received over and above the appropriation made direct to the institution for the exchange.

Mr. FITZPATRICK. That is for this particular purpose.

Mr. WOODRUM. You mean not for this particular item, but the total institution.

Mr. FITZPATRICK. This is not the total.

Dr. ABBOT. We have large sums for the whole institution.

Mr. WOODRUM. Yes.

Dr. ABBOT. For instance the recent expedition of Dr. Mann, Director of the Zoological Park, was paid for by private funds. He had an appropriation of \$20,000 for that.

Dr. WETMORE. About \$24,000.

Dr. ABBOT. About \$24,000 from the National Geographic Society, and there was still a remainder of a certain sum which was given by Walter Chrysler for a former expedition as well as certain other private funds.

As another example, Mr. John A. Roebling, of Bernardsville, N. J., has given the institution in the last 17 years something exceeding a half million dollars to promote the study of radiation and the variations of the sun in their relations to weather. Also after the death of his father, Col. W. I. Roebling, Mr. J. A. Roebling gave the large

collection of minerals which his father had made, and with it an endowment of \$150,000 to enable the institution to care for and to obtain desirable additions to the collection. And in addition to that we have endowments from various sources. For instance, in the will of Dr. William L. Abbott, that came in this year, an amount something like \$100,000 is given for zoology—that is Dr. William L. Abbott, of Philadelphia.

Dr. WETMORE. Of Philadelphia.

Dr. ABBOT. He had long been very much interested in the collection of specimens. We got from him from time to time gifts ranging anywhere from \$1,000 to \$5,000, and that was done over a long period of years. Were it not for the receipts from private sources of funds used to assist the work of the departments of the Smithsonian Institution, neither the work of the Institution nor the Government work could be taken care of so well.

In carrying on the Government work, such as Dr. Wetmore and Mr. Sterling do in expeditions carried on at remote places, it is quite difficult to buy supplies, such as shovels, and the daily work needed from the local Indians or Eskimos. When they buy in these places remote from Washington they want to get their money and you must pay them on the spot, I am constantly making allotments from private funds to promote the Government's expeditions, where the staff of the Institution is there for collecting interesting objects which naturally come to the National Museum. It would be surprising, perhaps, to know that of the numerous things that have come to the United States National Museum possibly one-third were actually provided by private donations to the Institution.

Mr. WOODRUM. Now, Doctor, you have set out in the justification here, under each of these different activities, a break-down of the funds.

Dr. ABBOT. Yes.

Mr. WOODRUM. The appropriation for 1937, 1938, and the estimate of 1939, and a brief description of these items are presented so the committee can understand them, and so far as I am concerned, I see no necessity of going into each one of them in any great particularity unless there are some questions about them or unless there is something you want to present to the committee. You have been with us a good many times, and we are familiar with your work.

Dr. ABBOT. I do not know, Mr. Chairman, whether the printing appropriation is in this part. When it comes up I would like for Dr. Wetmore to speak on that item.

Mr. WOODRUM. The printing situation?

Dr. ABBOT. Mr. Dorsey tells me the printing item will come later.

MAINTENANCE AND OPERATION

REPAIRS TO NORTH HALL OF NATIONAL HISTORY BUILDING

Mr. WOODRUM. Now, the item which is included for maintenance and operation Dr. Wetmore, has been changed, and there are some variations, which you might think should be discussed?

Dr. WETMORE. Under the head of maintenance and operation there is a slight change, Mr. Chairman. The appropriation for last year, as the committee will recall, carried \$10,450 for the elimination of

certain fire hazards in connection with the Natural History Building. That sum allows the construction of a new water main, to connect with the city water system for service to this building. We had only one before. It allows also for the renovation of the pressure pipes in the fire protection system for this building; and the renewal of fire hose and connections. That work is going forward now under the appropriation made and will soon be completed.

That was not a continuing item. In considering our needs for the coming year the Bureau of the Budget has deducted this \$10,450 from the appropriation for maintenance and operation and has given an increase of \$4,610 above the base thus obtained to provide for certain additional needs in building repairs that the ordinary appropriations cannot handle.

The Natural History Building of the United States National Museum was completed for occupancy in 1911, and naturally at this time, through usual causes there has been deterioration in it. In particular, there are coming some rather large breaks in the plaster, which is pulling loose on some of the walls. In one of the halls, the north hall in particular, that condition is very bad at the present time, and needs to be cared for without undue delay; \$3,000 of the increase of \$4,610 are estimated to care for the renovation of this hall. Part of this \$3,000 will be expended for movable scaffolding that we will need for this repair job and for use in similar work in other halls in the near future. The rest of the \$3,000 will be utilized in doing the actual work.

The walls are high, and we find that in other work it is essential that we have this scaffolding. Though scaffolding can be rented we can operate more economically if we own it as it is something that we need constantly in our operations.

REPAIRS TO ARTS AND INDUSTRIES BUILDING

The remaining amount, \$1,610, will be utilized in repairs to the Arts and Industries Building, known also as the Old National Museum, on the opposite side of the Mall.

That building was completed in 1883. Now we are having trouble with the spalling of the stone over the doors and windows. As a matter of fact, a piece of stone, weighing about a pound, fell out one time last summer from over the main entrance. Fortunately no one was injured but this might easily have happened.

We plan to use a filler that the builders use for the purpose on this stone, cement it, and then paint it to put it in good shape. This additional item of \$4,610 is indeed needed for these urgent repairs.

We anticipate and hope that, if the committee sees fit to include this sum, the amount may continue in future years as a regular item in this appropriation bill to enable us to take care of similar ordinary repairs as they arise year after year. We find we need more funds that are now available to keep our buildings in reasonable condition as regards safety to the public and protection for the collections.

MR. WOODRUM. In other respects, then, the items are the same as they were in the appropriation for this current year?

DR. WETMORE. There is no other change than just described.

MR. WOODRUM. The personnel is provided for; there is no other obligations in that way?

DR. WETMORE. That remains the same.

Mr. WOODRUM. Travel and communications expense.

Dr. WETMORE. Yes; that remains the same.

Mr. WOODRUM. Anything further, gentlemen?

DESCRIPTION OF ETHNOLOGICAL AND ASTROPHYSICAL WORK BEING
CARRIED ON

Mr. DIRKSEN. No questions, Mr. Chairman, but I thought it may be interesting to the members of the committee if we had a more detailed statement covering some of the work that has been carried on, especially, ethnological work, as well as the astrophysical work. It is always a matter of interest to me. I do not know whether the other members read it or not, but I take a great deal of interest in it, and I think the whole hearing is made more valuable by some of the detailed discussion. So if we will permit a little detailed discussion there, Mr. Chairman, I am sure it will be appreciated by many members.

Dr. ABBOT. We have Mr. Stirling here, who is the chief of the Bureau of American Ethnology, and he can give you a few words regarding the work which the Bureau is doing.

Mr. WOODRUM. Yes; we will be glad to hear you, Mr. Stirling.

Mr. STIRLING. The work that the Bureau has been doing the past year in archeological research, is the reconstruction of the life of the American Indians of the prehistoric period as interpreted from the remains that they have left behind them in various mounds, village sites, or ruins previously occupied by these early people.

NATURE OF WORK BEING CARRIED ON NEAR FORT COLLINS, COLO.

Taking up that work in chronological order: One of the most interesting features of our present work is that which I mentioned before in this meeting, being carried on by Dr. Roberts in northeastern Colorado where he is excavating the oldest habitation site known anywhere in the New World. It has been called Lindenmeier from the name of the owner of the land. Under 15 feet of sterile overburden there is a layer about 1 foot in thickness consisting of a relic-bearing deposit which represents a village site, occupied probably 20,000 years ago. Associated with the stone and bone artifacts which occur quite abundantly in this level, we find the remains of animals such as the now extinct American camel, and a bison of much larger size than the type now known to the American people. These animals were used as food by the Folsom people and we expect that when the bones have been collected and have been studied by our mammalogists they will be able to identify still other forms of now extinct animals that lived at the time this site was occupied by man.

One of the most interesting developments of the past year's work was the completion of the geological tie-up of the site. The Lindenmeier site is unique not only for the material found there but because it fits in with known geological structures. This tie-up has been made possible by following the geological formations all the way to the Platte River Valley. The conclusion of the geologists is that this site was occupied, not just after the last glacier period, as we had previously suspected, but during an oscillation period, when there was a temporary recession before the final glacial advance. It was during this final oscillation period that the Lindenmeier site was

occupied. Roughly estimated in years that would be about 20,000 years ago.

Dr. ABBOT. May I ask if this work was not done in cooperation with the experts of Harvard University?

Mr. STIRLING. Yes; the geological work was done primarily by Dr. Bryan and Mr. Ray, both of whom are geologists at Harvard.

Mr. HOUSTON. How is that financed?

Mr. STIRLING. The work is financed by private funds of the Smithsonian Institution but the work is being done by members of the Bureau of Ethnology staff whose salaries are paid from Government appropriation and who work under civil service.

Mr. HOUSTON. Where is this located?

Mr. STIRLING. It is in northeastern Colorado, about 18 miles northeast of Fort Collins.

Mr. HOUSTON. Fort Collins?

Mr. STIRLING. Yes.

Mr. WOODRUM. You had not finished, Mr. Stirling?

Mr. STIRLING. Mr. Houston was trying to find out just the location of the site, with reference to Kansas.

Mr. HOUSTON. Yes.

Mr. STIRLING. I do not know exactly what he has reference to, but the site is about 18 miles northeast of Fort Collins.

Dr. WETMORE. I think it is about 40 or 50 miles from the place he has in mind.

Mr. HOUSTON. That is what I thought.

Dr. WETMORE. This point is approximately 18 or 20 miles from Fort Collins, out on the plains; that will place it for you.

Mr. DIRKSEN. Are monographs available of this recent excavation work?

Mr. STIRLING. Yes. Two publications have been issued by the Smithsonian Institution in the miscellaneous collections. These were prepared by Dr. Roberts, who was in charge of the work. Both are now available. We can furnish them to you if you desire to have them.

Mr. DIRKSEN. Yes; I would like to have them.

Mr. STIRLING. We will be glad to furnish them to you.

Mr. WOODRUM. Dr. Abbot, you were about to make a statement, were you not?

Dr. ABBOT. I was merely going to observe, Mr. Chairman, that this is a very pretty exhibition of cooperation where you have in charge employees of the United States Government, the work carried on by the Bureau of American Ethnology with private funds supplied by the Smithsonian Institution, and with Harvard University cooperating to get the data revealed in geological strata.

SOLAR RADIATION WORK IN CONNECTION WITH WEATHER FORECASTING

Mr. DIRKSEN. Dr. Abbot, are any other countries doing anything with the principle of solar radiation in connection with weather forecasting?

Dr. ABBOT. I think not, sir.

Mr. DIRKSEN. We have been pioneers in that field, insofar as we have gone?

Dr. ABBOT. The Smithsonian Institution is generally regarded as the pioneer in that line. In fact, when I was over in England some years ago and talking with Dr. Simpson, head of the British Meteorological Service, he was so kind as to call me "the prophet" of solar radiation.

Mr. WOODRUM. I was going to say that instead of the Smithsonian Institution being the pioneer that Dr. Abbot is the pioneer in that field.

Dr. ABBOT. The committee might be interested to know that not only have I been occupying myself with solar radiation as the possible means of forecasting weather conditions but also solar radiation for power possibilities. I had on exhibition at the Great Lakes Exposition in Cleveland this year a small model solar flash boiler in which steam could be raised in from 3 to 5 minutes. It was automatic in its operation so that when the sun got behind the clouds, the water supply was instantly cut off, but whenever the sun shone the water supply maintained a constant pressure of steam. Steam development in that way would appear to cost about one-half cent per horsepower-hour. This is about the same cost that results from the use of coal or hydroelectric power. I feel now that if the coal and oil of this country should no longer be available then power could be supplied by solar radiation in this manner at about present rates.

Mr. DIRKSEN. What observations have been made and what data have you collected in regard to the meteorological aspect? It was most interesting to me when I read an article recently which brought that matter to my attention again.

Dr. ABBOT. Mr. Chairman, I am convinced there that the weather is governed to a very large extent by the variations of the sun. The variation of the sun is not large; it amounts to from 1 to 5 percent at the very maximum and ordinarily does not exceed more than $1\frac{1}{2}$ to 2 percent. Yet it seems to me to offer an opportunity to enable us to forecast weather conditions in a manner that has not been done heretofore. I believe that if we were able to observe the variations of the sun from day to day, with accuracy to one-fifth of 1 percent of the sun's total radiation, we would find it possible to furnish the Weather Bureau with data from which they would probably be able to make forecasts of some features of weather conditions as much as 2 weeks in advance instead of from 1 to 2 days. In fact, a year ago, as you perhaps recall, an amendment to the urgency deficiency bill carried \$200,000 to enable me to set up a program of that kind. It passed the Senate but it was lost in conference. With that sum we would have established seven additional solar radiation observatories in the most suitable places on the earth for the purpose of furnishing this information. That project, however, is not now in the estimates though I still believe that it would be possible by that means, at an annual expense of \$200,000, to give the Weather Bureau information from which to make useful forecasts as much as 2 weeks in advance.

Now on the other hand we have fluctuation of the radiation of the sun which occurs over long periods of months and years. In studying these, I found that there are no less than 12 regular periods in the variation of the sun over long periods of time. Each of them produces a corresponding period in weather. All of those variations are associated with the sun-spot cycle. There are two sun-spot cycles in an interval of about 23 years, just a little less than 23 years. The 12

regular periodicity periods in the sun's radiation which I spoke about are all aliquot parts of 23 years. Hence the features of weather which occur during an interval of 23 years tend to repeat themselves in the next 23-year interval. If we double the 23 years, or consider a 46-year period, we find a powerful cycle which controls the level of the water in the Great Lakes. I have the cycle of the variation of the level of Lake Huron for the last century, which shows that the 46-year fluctuation is the main cycle in the variation of the level of Lake Huron. It is, of course, associated with the drought, the great drought in the Northwest. We are just now passing through the end of that drought period which began about 1930 and which was, of course, associated with the lower level of the Great Lakes. We may expect, I think, a recurrence, based upon this fluctuation, of another drought period beginning about the year 1975. In each case the droughts last for about 10 years.

We are, I believe, on the very verge of recovery from the drought of the last 46 years' period. We have no expectation of another one of such great consequence until 1975, although following the 23-year period there will be a minor one during the decade 1950-60. I feel that a study of these variations of the sun and their relationship to the water level in the Great Lakes, and to the precipitation and the drought in the northwest are of very great importance. That type of research though, is not adequately provided for in this appropriation for the Astrophysical Observatory.

INVESTIGATIONS INTO RELATIONSHIP OF PREHISTORIC CULTURES BETWEEN NORTH AND SOUTH AMERICA

Mr. WOODRUM. That is a very interesting statement. Is there anything further you wish to add, Mr. Stirling?

Mr. STIRLING. I could describe, perhaps, Mr. Chairman, a little more briefly a few of the other interesting things that are being carried on.

Mr. WOODRUM. Just a very few.

Mr. STIRLING. This work has been carried on by members of the staff. Dr. Strong, who has been for some years a member of the staff, but who went to Columbia this past year, conducted a very interesting piece of work in Spanish Honduras along the Ulua River, making observations with a view to determine the relationship between the prehistoric cultures of northwestern South America, and Central America. Dr. Strong discovered traces of an ancient civilization preceding the Maya people who once lived in the Ulua Valley, throwing new light upon the ancient history of this section. He not only determined that the South American civilization was earlier than that of the Maya, but he was finally able to demonstrate that there was evidence of a third civilization preceding both of these.

He likewise obtained for the National Museum a very beautiful collection of ancient pottery. The potters of this region were among the most skilled in aboriginal America.

Mr. WOODRUM. How old is that supposed to be?

Mr. STIRLING. The finest ware was made by a people who were directly related to the Maya Indians, and it goes back to the time that we call the middle period of the Maya culture, dating about the year 1,000 A. D. This date is pretty accurately determined because

of the habit the Maya people had of carving dates on their stone monuments. These dates in the Maya calendar have now been correlated with the Christian calendar which we use.

This is another example of the work that we have been conducting, and is part of a program of work designed to extend eventually into South America.

STUDY OF LIVING TRIBES OF INDIANS

Our work in ethnology deals with living tribes of Indians. Dr. Michelson spent all of last summer in the field in the area of James Bay and Hudson Bay in Canada, studying the Algonquin Indians of this region.

Dr. Harrington has worked principally with some of the old Indians who are representatives of the tribes living in the central valleys of California; a region where many small tribes formerly existed, but which are now on the verge of extinction. He has been trying to rescue as much information from the old living Indians as is possible before it is too late to get it.

Dr. Steward has worked with the Shoshone tribe in the great basin region of the West, principally in Nevada and California. He is now completing a large monograph on these tribes which will be of great interest to ethnologists. The Indians of this area were the most primitive of all aboriginal Americans.

The work that we are doing is along those two lines. I mention these few examples as typical of the work being carried on by our archeologists and ethnologists. They by no means represent all of the work we have been doing.

Mr. WOODRUM. That is just typical of it.

Mr. STIRLING. They are given merely as samples.

ATTENDANCE AT THE NATIONAL MUSEUM

Mr. WOODRUM. All right, gentlemen. Is there anything else you would like to say, Dr. Wetmore? If not, Dr. Abbot, you might take up some of the items you want to discuss.

Dr. ABBOT. Perhaps we might pass over to the preservation of collections.

Mr. WOODRUM. All right. Did you bring some specimens?

Dr. WETMORE. Yes. The year at the National Museum has been quite a remarkable one in that the attendance has exceeded any that we have ever had before, numbering 2,291,685 people, the highest previous report on record being 1,973,673 in the fiscal year 1936.

Mr. HOUSTON. For a year?

Dr. WETMORE. Yes.

Mr. HOUSTON. What was the figure?

Dr. WETMORE. For the fiscal year that ended June 30 last there were 2,291,685.

Mr. HOUSTON. That is the Museum?

Dr. ABBOT. That is the Museum Building.

Mr. HOUSTON. I see.

Dr. WETMORE. In the month of August alone we had over 350,000 people.

Dr. ABBOT. That does not include the Freer Galleries.

Dr. WETMORE. No.

Dr. ABBOT. And it does not include the National Zoological Park either.

Dr. WETMORE. No.

Mr. FITZPATRICK. Washington is getting to be quite a summer resort.

Dr. WETMORE. Yes.

STATUS OF HOUSING FOR SPECIMENS

Mr. HOUSTON. Are you able to adequately house your specimens?

Dr. WETMORE. We do not have enough room to adequately take care of all of the collections. We have plans for the extension of the National History Building by wings on either end. We have been hoping to find some means, perhaps through the P. W. A. or some other source to enable us to put that plan into execution, but so far we have not been able to do so.

Mr. HOUSTON. How old is the brick building?

Dr. WETMORE. The brick building was completed in 1883. It has a remarkable history in that the original appropriation was \$250,000 and the building cost \$225,000. In other words there was a surplus of \$25,000. Possibly this may be the only instance in the history of the Government where a building was constructed for less than the original appropriation?

Mr. FITZPATRICK. Has that \$25,000 been drawing interest ever since?

Dr. WETMORE. Yes; I suppose it has.

The stone building on the opposite side of the park, the Natural History Building, was completed for occupancy in 1911 and we have had no addition to our museum space since, except for a shed-like building behind the Smithsonian Institution which was built of sheet iron during the war as a temporary place for the National Advisory Committee on Aeronautics. At the close of the war that was turned over to us to be used in exhibition of aircraft. It is a temporary structure and should be replaced.

Dr. ABBOT. There is another point of interest in connection with what Mr. Houston has just said, and that is that the wings on the Natural History Building were authorized by Congress to cost \$6,500,000, in 1930, but we have never yet been able to get the appropriation.

Dr. WETMORE. We had a \$10,000 fund made available for the preparation of preliminary plans, which have been prepared, but the main appropriation has never been made.

Mr. HOUSTON. If you had new wings would that enable you to give up the brick building?

Dr. WETMORE. No.

Mr. HOUSTON. You would still have to use it?

Dr. WETMORE. Yes. We need all the additional space, and as a matter of fact, we are utilizing every possible foot of the present area, Mr. Houston, in the housing of study collections or for public exhibition. In selecting additions to the collections that we now have I suppose we refuse fully half of those that are offered to us.

Mr. HOUSTON. I was just wondering what you do with them if you cannot take care of them.

Dr. WETMORE. We accept only those things that we can care for properly.

Mr. HOUSTON. I understood you to say that you had to refuse about half of those that were offered.

Dr. WETMORE. The additions to the collections last year included about 361,000 specimens, the average number of new items that come to us each year.

Mr. HOUSTON. I was wondering whether you would take in all of those if you had more space.

Dr. WETMORE. We probably would not take any more.

Mr. HOUSTON. You would not take in any more of them if you had more room?

Dr. WETMORE. We probably would not accept much more than we are now doing, except for certain large items that we cannot now house. At the present our laboratory rooms are filled with overflow into the halls outside the laboratories. When new collections of considerable size are received we are hard put to it to find a proper place to accommodate them. That is the reason why we would like very much to see this building extension completed.

Mr. HOUSTON. How is the old building; is it still in a pretty good state of preservation?

Dr. WETMORE. The old building is in fair condition; but it is inadequate for the purpose. As I said, it was built in 1883. Since then our knowledge and ideas regarding museum construction have progressed as have those along other lines in the same period of time; the building is not properly planned for the purpose for which it must now be used. There is a great deal of waste space in it; it is not properly lighted nor is it properly designed.

NEED OF ADDITIONAL GUARDS

Mr. HOUSTON. A while ago something was said about not having sufficient guards.

Dr. WETMORE. Yes.

Mr. HOUSTON. The purpose of the guards is to protect these exhibits?

Dr. WETMORE. Yes.

Mr. HOUSTON. And the specimens you have.

Dr. WETMORE. Yes, sir. Our guard force operates on a 7-day week basis; that is because the collections in the building have to be guarded 24 hours a day and every day in the week. We do not have all the guard posts that we should have in view of our crowded situation, and the men we have cannot be excused for the full amount of time due them for Sunday and holiday service. Last year the Congress allowed us an addition of four more men who have been added to the force. While this has been of measurable assistance it does not cover our needs. We estimate that we need between 20 and 25 additional guards before we can have a reasonably adequate force.

Mr. HOUSTON. Are you asking for any additional guards in this 1939 estimate?

Dr. WETMORE. There is nothing included for that purpose here.

RECENT ADDITIONS OF COLLECTIONS OF SPECIMENS

Mr. HOUSTON. All right, Dr. Wetmore, would you show us your specimens?

Dr. WETMORE. I have told this committee on previous years the three sources from which our specimens come; from expeditions made by the personnel of the Institution, principally under funds furnished by the Smithsonian Institution, or given to Smithsonian for the purpose by private individuals; by gifts from interested individuals; and in some cases by purchases from special funds available under the Institution.

A moment ago I mentioned that the additions to the collections this year have been more than 360,000 items, including many, many interesting things. As examples of our new accessions I have brought with me a few specimens of various kinds. These first objects are a pair of gaming devices—primitive dice—used in ancient times by the Indians along the Columbia River. They were shaken up in a basket and then cast, bets being made on the way in which the designs on the two sides would turn. Here is an article made from clay, a whistle, secured by Dr. Strong.

Mr. FITZPATRICK. How old is that article [indicating]?

Dr. WETMORE. About 1,000 years old, I should say. Mr. Stirling mentioned a few moments ago the work of Dr. Strong in Spanish Honduras stating that the culture from which this whistle comes antedates the Mayan in Mexico. This whistle comes from his excavations. It was probably used by priests for ceremonial purposes.

Mr. HOUSTON. Where did that come from?

Dr. WETMORE. From the Ulua River in Spanish Honduras. You will note from this demonstration (blowing) that it is still in excellent condition in spite of its age.

Mr. WOODRUM. That is perfectly sound.

Dr. WETMORE. Yes; this past summer the Smithsonian Institution sent Mr. Gilmore, Curator of Vertebrate Paleontology, to Utah to make collections of fossil animals. In one location in the north-central part of the State he found five fossilized lizards of a type that is entirely unknown to science. Here is the head of one of them (indicating) which was found incased in stone, the covering having been partially removed in our laboratory in preparation for study. You will notice particularly the broad form of the teeth which is most unusual. The animal is one that is unknown to science.

Mr. FITZPATRICK. You do not know what it was?

Dr. WETMORE. It was a lizard, perhaps 3 or 4 feet long, but of a species previously unknown to science. There were five of these animals lying together. They date back to the latter part of the Cretaceous period, which would place their age at approximately 100 million years.

Mr. HOUSTON. A hundred million years?

Dr. WETMORE. Yes.

Mr. HOUSTON. That antedates the New Deal.

Mr. WOODRUM. A hundred million; New Deal figures.

Mr. FITZPATRICK. What program have you now in Colorado where you were doing a lot of excavation work?

Dr. WETMORE. At the Lindenmyer site?

Mr. FITZPATRICK. Yes.

Dr. WETMORE. Mr. Stirling has just told us about that.

Mr. FITZPATRICK. Very well. I was out of the room at the moment.

Mr. WOODRUM. You will have to read that. He gave us a very interesting statement.

Mr. FITZPATRICK. I am sorry I missed it. I was very much interested in that before.

Mr. WOODRUM. Yes.

Dr. WETMORE. We have accumulated in the National Museum a wonderful collection of meteorites, those objects of metal and stone that come to us from outer space. This particular specimen, an iron meteorite, was a gift to our collection from a friend, this past year, and is of a particularly valuable kind.

It comes from Arizona. You will notice the fine character of the figures on the polished end. We cut these materials in one of our laboratories, a work that requires considerable labor and skill. For the purpose there is used a steel band that is set against the meteorite while water carrying a very fine carborundum drips on it at the point of contact, actually wearing the specimen in two. To make this cut required about 2 days.

Mr. HOUSTON. What is in that meteorite?

Dr. WETMORE. Iron and nickel are the principal contents. There is some cobalt, and traces of sulphur, carbon, and other elements in it.

Mr. FITZPATRICK. What is the largest find of any of these meteorites you have records of?

Dr. WETMORE. Some of them weigh as much as 30 tons. There is record of one that fell in South Africa that had a weight of about 35 tons.

Mr. FITZPATRICK. I believe I asked you 2 years ago if you had ever heard of anybody who had been injured on account of the falling of a meteorite.

Dr. WETMORE. I know of no one who actually has been struck. We have one meteorite that fell a few feet behind a funeral procession in Colorado, without injury to anyone; and there is a story something over a hundred years ago, of a meteorite having fallen on a vessel at sea.

Mr. HOUSTON. How big was it?

Dr. WETMORE. We do not know, but it is believed that it was about as large as that one [indicating].

Mr. HOUSTON. You have record, however, of some large ones having fallen.

Dr. WETMORE. Yes.

Mr. HOUSTON. And when they hit the ground they go away down into the earth.

Dr. WETMORE. They may make quite a large depression.

It is believed now that the Meteor Crater near Winslow, Ariz., was caused by a meteorite, or a group of meteorites falling. Prospectors have actually located a mass of iron in the southwest part of the crater in question, but have not been able to excavate it as yet.

Here are two interesting specimens of minerals, Mr. Chairman, one a pine cone and the other a twig of the same kind that have been turned to opal, a most unusual occurrence. The specimens were buried in volcanic ash and as they decayed the vegetable matter was replaced by opal.

I have several interesting specimens of diamonds here taken from placer deposits near Placerville, Calif., found during excavations in mining for gold. Apparently somewhere in the Sierras there are diamonds, although no one has ever located them and diamonds are rare in North America. We have some from Arkansas, and a few from other localities in the United States. Their occurrence is rare and unusual.

Mr. FITZPATRICK. Is this a valuable item?

Dr. WETMORE. From a scientific standpoint yes, but as a commercial article they are number two diamonds; as I recall we bought the lot for \$150.

Mr. HOUSTON. You say that was in Nevada?

Dr. WETMORE. That was in California.

Mr. HOUSTON. In California?

Dr. WETMORE. Yes; near Placerville.

I have just returned myself from a 2 months' expedition in Venezuela when I made a collection of birds. Governmental authorities were very kind, permitting me many privileges and I have returned 3 days ago with a collection of about 450 birds that go into the study collections of the National Museum. I have brought a few examples today to demonstrate the brilliant color and curious form found in many tropical birds. Here is one that is somewhat similar to our woodpeckers in habits but of a different family, the woodhewers. You will note the curious form of the long, curved bill.

Mr. HOUSTON. It looks something like a woodpecker. Does it feed on wood?

Dr. WETMORE. With its long bill it probes in crevices in the bark of trees.

Mr. WOODRUM. How do you get these birds?

Dr. WETMORE. By shooting them.

Mr. WOODRUM. By shooting?

Dr. WETMORE. Yes; we use very fine shot, the size varying according to the size of the bird. The birds are skinned in the field and so prepared for preservation in the Museum.

Mr. FITZPATRICK. How close can you get to them?

Dr. WETMORE. Sometimes they come too close. We try not to get so close as to injure them, as specimens, when we shoot them. Birds in the section where I worked are tremendously abundant. After 35 years of experience in this type of work I believe that I have secured more interesting material on this last expedition than I have ever taken before during a similar period.

Mr. WOODRUM. These are types of birds that you have not had before?

Dr. WETMORE. Many of them are additions to what we have. Our collections from that area previously have been poor, and consist of old material taken many years ago. I obtained something more than 200 different kinds of birds.

Mr. WOODRUM. Those are tropical birds?

Dr. WETMORE. Yes.

Mr. WOODRUM. I judged that on account of the high colors.

Dr. WETMORE. The region was truly tropical. The weather that I experienced resembled that of the months of July and August here in Washington.

Mr. WOODRUM. That is a very interesting collection, Doctor.

Dr. WETMORE. Thank you, sir.

PRINTING AND BINDING

Mr. WOODRUM. Is there anything further you want to tell us, Dr. Abbot? You had something you said about printing and binding.

Dr. ABBOT. Mr. Chairman, we have with us here, Mr. True, the editor, who perhaps would like to have something to say to the committee.

Mr. WOODRUM. We would be glad to hear you, Mr. True.

Mr. TRUE. Mr. Chairman, this appropriation provides for printing the Smithsonian Annual Report and the scientific publications of the National Museum and the Bureau of American Ethnology, as well as all the binding for the Smithsonian Library and miscellaneous forms and labels for all the Smithsonian bureaus.

The Smithsonian Institution has a large staff of scientists engaged in original fundamental research in many fields of science, much of which forms the basis for economic and practical application.

Before this new knowledge can be used by economic workers and students it must be made available in published form. Some of this research you have heard described here today. Much of it has not been made available to other workers, however, because of lack of funds to publish it.

The Smithsonian Institution's appropriation has not been adequate for its needs since 1932. In that year we suffered a drastic cut, and in the following years there has been only a partial restoration, so that with this increase which you see here of \$3,000 the total amount is still only 65 percent of what it was for the last year in which we had adequate funds for our printing needs. In addition to that we have just received a letter from the Public Printer announcing a change in the method of charging for printing and we are afraid that is going to have the effect of further curtailing the effectiveness of our appropriation. I would like to call your attention to one portion of this letter in which he states—

that bills and estimates prepared after that date [that is, October 15, of this year] will be prepared under the new scale and will, in many instances, vary greatly from those rendered for similar work. In some cases the charge will be higher, in others lower. If a majority of a department's requisitions are for work * * * involving much composition and short press runs, it bills will be higher.

Practically all of the printing that is done by the Smithsonian Institution will come under the classification referred to in this letter as the type that will cost more. I would say that about 90 percent of it comes under that category, so that it is doubtful whether this increase of \$3,000, which is vitally needed, will take care of our needs.

Mr. WIGGLESWORTH. How does this compare with your expenditures for the present fiscal year?

Mr. TRUE. \$65,000 is the amount appropriated.

Mr. WIGGLESWORTH. How much was actually spent in the present fiscal year?

Mr. DORSEY. During the present fiscal year there was a curtailment or a reserve of 10 percent against the appropriation, so we really have available for the fiscal year 1938 a total of 58,500 which includes the publication of the American Historical Report for this year.

Mr. WIGGLESWORTH. Is that \$65,000 over and above the 10-percent reserve, or should you deduct the 10-percent reserve from that?

Mr. DORSEY. Deduct it from that.

Mr. WIGGLESWORTH. So you spent \$58,500 this year, or will, unless the Budget releases the other.

Mr. DORSEY. Yes.

Mr. WIGGLESWORTH. Unless you get released from that reserve.

Mr. DORSEY. Yes.

Dr. WETMORE. We can use this, Mr. Chairman.

Mr. WOODRUM. Yes.

Dr. WETMORE. I might say here, Mr. Chairman, that under the present law there is a balance on the allotment to the National Museum of a little more than \$11,000 that has not yet been obligated. And at the present time we have manuscripts on hand that are ready for printing that will cost more than \$40,000 and which will have to be held up until such time as we can have sufficient funds to publish them.

Mr. FITZPATRICK. I am sorry, Mr. Chairman, but I must leave.

Mr. WOODRUM. Very well.

Dr. ABBOT. The situation for printing in the National Museum is a good deal like it is in the other bureaus. The Bureau of American Ethnology has on hand a large amount of manuscript that cannot be printed.

Mr. STIRLING. We have approximately \$60,000 worth of manuscripts that have accumulated during these dry years, and we have not been able to publish them currently, and we are getting a greater output each year.

Mr. WOODRUM. All right, gentlemen; is there anything further you wish to add? Have you covered all of the items under preservation of collections?

Dr. WETMORE. Yes; that is under the general item of expense.

Mr. WOODRUM. The general item?

Dr. WETMORE. Yes.

Mr. WOODRUM. Well, that just about covers everything?

Dr. WETMORE. Yes.

Mr. WOODRUM. We thank you gentlemen.

Dr. STOCK. May I make a brief statement on behalf of the American Historical Association, Mr. Chairman?

Mr. WOODRUM. Yes.

Dr. STOCK. It will be very brief. I am here in place of Dr. Jameison who has been with you before for the past several years, and because of your acquaintance with him, and because of your knowledge of the work of the American Historical Association, there is no need of a long statement from me. I might say that I am representing the American Historical Association. We are chartered by Congress, and according to the conditions in that charter we are to report once a year.

The Association has been doing some very definite work. First of all, we publish the proceedings of the Historical Association; and second, we keep each year a bibliography of everything that has been added to American history during the current year; and third, we publish in permanent form various documents of historic importance. For example, in one year we published the correspondence of John C. Calhoun, in another, the autobiography of Martin Van Buren, and yet another the diary of Edward Bates, a member of Lincoln's Cabinet.

You have been hearing a great deal of history as revealed by nature, and we feel that history as contained in our documents ought to be preserved, and for that reason we feel the appropriation is very necessary.

Mr. WOODRUM. Thank you very much, Doctor. That concludes the presentation of the Smithsonian Institution.

Dr. ABBOT. Yes.

TUESDAY, DECEMBER 14, 1937.

AMERICAN BATTLE MONUMENTS COMMISSION

STATEMENT OF JAMES E. MANGUM, EXECUTIVE ASSISTANT,
AMERICAN BATTLE MONUMENTS COMMISSION

SALARIES AND EXPENSES

Mr. WOODRUM. We will take up next the estimate for the American Battle Monuments Commission, which reads as follows:

For every expenditure requisite for or incident to the work of the American Battle Monuments Commission authorized by the Act of March 4, 1923 (36 U. S. C. 121-133), and by Executive Order Numbered 6614 of February 26, 1934, including the acquisition of land or interest in land in foreign countries for carrying out the purposes of said Act and Executive order without submission to the Attorney General of the United States under the provisions of section 355 of the Revised Statutes (34 U. S. C. 520; 40 U. S. C. 255): employment of personal services in the District of Columbia and elsewhere: including not to exceed \$3,000 for allowances for living quarters, including heat, fuel, and light, as authorized by the Act approved June 26, 1930 (5 U. S. C. 118a); purchase and repair of uniforms for caretakers of national cemeteries and monuments in Europe at a cost of not exceeding \$1,200; travel expenses; rent of office space in foreign countries; the maintenance, repair, and operation of motor-propelled passenger-carrying vehicles which may be furnished to the Commission by other departments of the Government or acquired by purchase; the purchase of one motor-propelled passenger-carrying vehicle at a cost not exceeding \$750; printing, binding, engraving, lithographing, photographing, and typewriting, including the publication of information concerning the American activities, battlefields, memorials, and cemeteries in Europe; the purchase of maps, textbooks, newspapers, and periodicals, \$150,000: *Provided*, That notwithstanding the requirements of existing laws or regulations, and under such terms and conditions as the Commission may in its discretion deem necessary and proper, the Commission may contract for work in Europe and engage, by contract or otherwise, the services of architects, firms of architects, and other technical and professional personnel: *Provided further*, That the Commission may purchase supplies and materials without regard to section 3709 of the Revised Statutes (41 U. S. C. 5) when the aggregate amount involved does not exceed \$500: *Provided further*, That when traveling on business of the Commission, officers of the Army serving as members or as secretary of the Commission may be reimbursed for expenses as provided for civilian members of the Commission: *And provided further*, That the Commission may delegate to its chairman, secretary, or officials in charge of either its Washington or Paris offices, under such terms and conditions as it may prescribe, such of its authority as it may deem necessary and proper.

Mr. Mangum, you are estimating \$150,000 for the fiscal year 1939?

Mr. MANGUM. Yes, sir.

Mr. WOODRUM. That is as against \$138,673 for the fiscal year 1938?

Mr. MANGUM. The figure of \$138,673 is the amount of the direct appropriation that was made to the Commission for maintenance purposes in 1938. However, in addition to that amount, \$21,327 was reappropriated, making a total of \$160,000 available for these purposes in 1938. For the fiscal year 1939 our estimate is \$150,000, or \$10,000 less than in 1938.

JUSTIFICATIONS OF ESTIMATES FOR 1939

Mr. WOODRUM. Now, we will put in the record at this point a letter from General Pershing setting forth a statement of justifications for the estimates.



